carin™
NAVIGATION SYSTEM

user guide
bedienungsanleitung

GB

D

CARiN 522/520

Philips Car Systems

mannesmann VDO

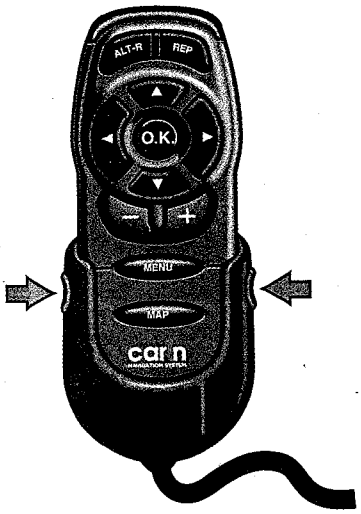


Fig. 1a

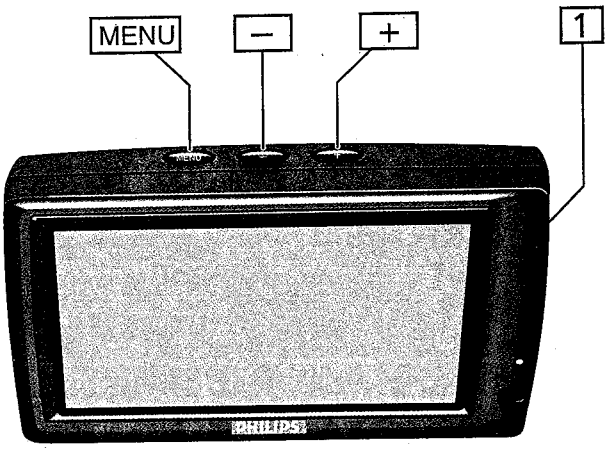


Fig. 2a

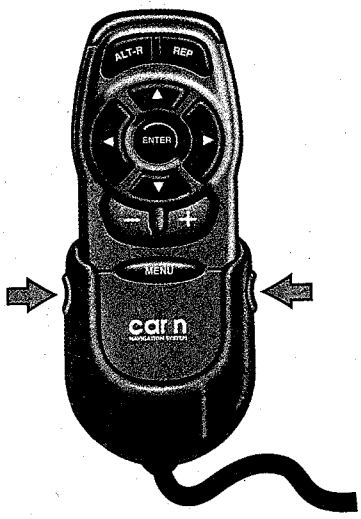


Fig. 1b

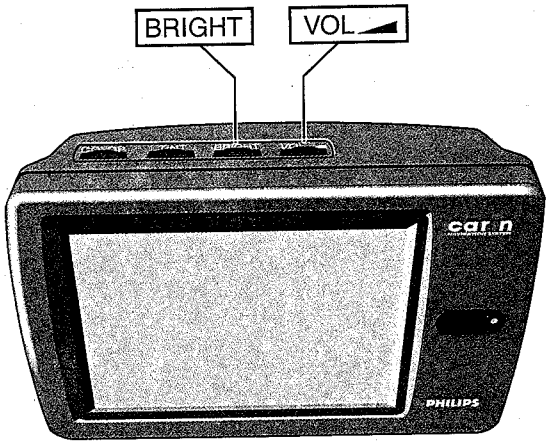


Fig. 2b

Fig. 3

Operating instructions	Page 7	GB
Illustrations	Page 3	
Guarantee and service	Pages 95 - 101	

Bedienungsanleitung	Seite 51	D
Abbildungen	Seite 3	
Garantieleistung und Service	Seiten 95 - 101	

Contents

GENERAL INFORMATION 7
CONTROLS 10
THE CARiN MENU SCREEN 16
MAIN MENU 17
DESTINATION INPUT 18
GUIDANCE 25
EMERGENCY 32
ALTERNATIVE ROUTE 33
DESTINATION STORE 34
VIA POINTS 36
SYSTEM SETTINGS 38
MAP CDs 42
MAINTENANCE 42
HOW DOES CARiN NAVIGATION WORK? 43
SCREEN ICONS 46
TMC ICONS 47
MENU OVERVIEW 48
TROUBLESHOOTING 49

Inhalt

ALLGEMEINE INFORMATIONEN 51
BEDIENELEMENTE 54
DER CARiN MENÜBILDSCHIRM 60
HAUPTMENÜ 61
ZIELEINGABE 62
ZIELFÜHRUNG 69
NOTFALLMENÜ 76
ALTERNATIVE ROUTE 77
ZIELSPEICHER 78
WEGPUNKTE 80
EINSTELLUNGEN 82
KARTEN-CDs 86
WARTUNG UND PFLEGE 86
WIE FUNKTIONIERT CARiN NAVIGATION ? ... 87
KARTENSYMBOLE 90
TMC-SYMBOLE 91
MENÜ-ÜBERSICHT 92
STÖRUNGEN UND MÖGLICHE BESEITIGUNG 93

With the CARiN Navigation System you have purchased a powerful tool to assist the driver in daily traffic. By automatic route planning and guidance you can concentrate on the essential things in today's growing traffic – especially in congested areas. Complicated and time-consuming planning with conventional city and road maps is no longer required.
You simply enter the destination before driving off, activate "Guidance" and CARiN does the rest.

CARiN offers you guidance advice in both an acoustical and visual way. Few controls and a simple menu structure ensure ease of operation.

In combination with an optional TMC radio CARiN will also provide you with the actual traffic situation on your route and will guide you around the obstruction when you like to.

Attention!

⚠ The usage of the navigation system does not exempt the driver from his responsibilities. Pay attention to the local traffic regulations. Watching the road is more important than watching the screen!

⚠ The guidance advice provided by the navigation system is a suggestion only. The driver is ultimately responsible for the safe operation of the vehicle and therefore evaluate whether it is safe to follow these directions.
If the current traffic situation and the advice of the navigation system are in contradiction, traffic regulations always have priority over advice given by the system.
In case you decide not to follow the suggested route, CARiN will automatically calculate a new route and provide new suggestions (automatic re-routing function).

⚠ **We recommend that you change system settings or enter new destinations only when the car is not moving or let it be done by your passenger.**

⚠ During driving always store the remote control in its holder.

⚠ The remote control contains batteries. Therefore do not expose to direct sunlight (high temperatures may discharge the batteries and increase the risk of leakage).

⚠ To avoid faulty operation or interference of the system do not cover the GPS aerial.
Stickers on the car windows within the area of the GPS aerial may also influence the GPS reception.

⚠ In some areas it is possible that not all information for a road is covered. For example prohibitions of entry into pedestrian precincts, the driving direction of a one-way street or turning prohibitions are not available. In these areas the navigation system gives a warning. The local traffic regulations always have priority over the advice given by the navigation system. Always obey road signs and traffic regulations.

Guidelines and recommendations for safe use of the CARiN Navigation System

- Glance at the screen only when necessary and safe to do so. If prolonged viewing of the screen is necessary, pull over in a safe and legal manner.
- If your display is mounted to a flexible holder, position the screen so that glancing at the screen can be performed quickly and easily and reduce glare and reflections. Pull over in a safe and legal manner before making any adjustments.
- If your display is mounted on a fixed holder, check if your dealer has mounted it according to the above recommendation.
- The display should not be placed in a location which hinders the view of any critical elements necessary to operate the vehicle properly (i.e. the road, the mirrors, instruments, vehicles surroundings). In addition the display should not be placed in a location which may obstruct the airbags should they deploy.
- In case you need to find an emergency service do not only rely on the navigation system. It cannot be guaranteed that the CARiN database contains all available emergency services in your neighbourhood. Use your own judgment and abilities to ask for directions in such a situation.
- The CARiN Navigation System does not take into account the relative safety of the suggested routes. The suggested routes do not reflect road closures or construction, weight or height restrictions, traffic or weather conditions, or any other factors which may affect the safety or timing of the routes. Use your personal judgment for verification of the suggested routes. Use the alternative route function or the via point function to get better route suggestions, or simply drive the preferred route and let the automatic re-routing function calculate the preferred route.
- Please take care that everybody using the CARiN Navigation System has access to these directions for use and reads the given recommendations and guidelines carefully before the initial use of the system.

Notes

- After transport of the car by a car train or a car ferry the navigation system may need some minutes for exact repositioning.
- After the car battery has been disconnected, the system may need up to 15 minutes for exact repositioning. The car has to be situated outdoors and the system has to be switched on to receive the GPS satellites.
- The system is fully operational even without valid GPS data, but the accuracy of positioning may decrease.
- As soon as sufficient GPS data is received the colour of the satellite icon in the GPS window changes from red to green.
- On motorways the distance indications of CARiN for exits are different from those on the motorway signs. The motorway signs refer to the distance to the beginning of the exit, whereas CARiN refers to the end of the exit. This is the point where you have to turn.

Remote control (Fig. 1, page 3)

The CARiN Navigation System is controlled by one of the infrared remote controls shown in figure 1, depending on the version.

☞ Press the release keys at both sides of the holder to remove the remote control.

☞ Before driving off, slide the remote control back into the holder until it clicks into position.

The keys on the remote control have the following functions:

ALT-R	Plan an alternative route.
REP	Repeat current acoustical guidance advice.
▲	Cursor key upwards; select options.
◀	Cursor key left; select options.
▶	Cursor key right; select options.
▼	Cursor key downwards; select options.
ENTER/O.K.	Enter or O.K.* key; confirm a selection.
−	Decrease voice volume of guidance advice.
+	Increase voice volume of guidance advice.
MENU	Show Main Menu.
MAP*	Enter/exit the route map or car position map (in all menus where a map option is available)

- Only highlighted options can be selected with the cursor keys.
- If you use your remote control in it's holder, the internal batteries are not used.

When the batteries are exhausted the icon lights up in the status line of the display.

☞ Slide the remote control into its holder to resume normal operation.

☞ Replace the batteries.

Keyboard illumination

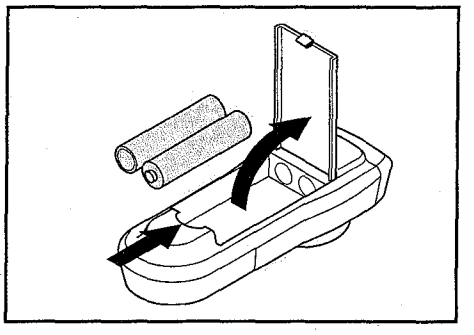
The keyboard of the remote control is illuminated when you press one of the keys. The illumination is switched off automatically after a while. When inserted in the holder the keyboard is illuminated permanently as long as the ignition is switched on.

* only certain versions

Replacing batteries

You have to replace the batteries of the remote control when the navigation system does not respond to a key press or the icon lights up in the status line of the CARiN display.

- ☞ Open the battery compartment on the back of the remote control.
- ☞ Remove the discharged batteries.
- ☞ Insert two new LR6 type (Size AA) batteries.
  Pay attention to correct polarity (marked in the compartment).
- ☞ Close the battery compartment.



Notes:

⚠ In many countries exhausted batteries may not be disposed of with your household waste. Please determine how to dispose of exhausted batteries according to local regulations.

⚠ Only use leak-proof batteries. Battery leakage can cause damage to the remote control or to your car.

⚠ Never expose the remote control to direct sunlight or extreme heat. The batteries are discharged and the risk of leakage is increased.

- If you permanently use your remote control in its holder, we recommend that you remove the batteries from the remote control.

Switching on / off

The system is switched on and off together with the ignition.

– The display first shows a safety notification for usage of the system.

☞ Confirm this notification by pressing the **ENTER/O.K.** key.

– The Main Menu appears.

• After some seconds the system is initialised and you can select the navigation functions (options in highlighted letters).

Stand-by mode

If you are disturbed by the brightness of the display screen (for example by night or in tunnels) you can switch off the display.

☞ Select "Stand-by" in the main menu.

– The display is switched off.

• If an external loudspeaker is connected to your system (optional), you will still hear the guidance advice.

☞ Press one of the cursor keys ◄, ►, ▲, ▼, the **ENTER/O.K.** key or the **MENU** key on the remote control to switch on the display again.

• If the navigation system was switched off in stand-by mode it restarts in stand-by mode when switching the ignition on again.

Volume adjustment

☞ Press + or − key on the remote control to adjust the voice volume of the guidance advice.

– You hear "Louder" or "Softer" with the current volume setting.

• This volume adjustment influences both the volume level of an external speaker (if installed) and the volume level of the built-in speaker (in the display unit).

Displays (Fig. 2, page 3)

The CARiN Navigation System provides a 16:9 wide screen or a 4:3 standard colour display, depending on the version.

Wide screen display (16:9), Fig. 2a

The wide screen display has an On Screen Display (OSD) menu system for controlling the display.

The OSD menu allows you to adjust the following settings:

- ❑ Volume
- ❑ Brightness
- ❑ DisplayMode

Enter/exit the OSD menu:

☞ Briefly press the MENU key on top of the Display.

– The OSD menu is shown.

☞ Briefly press the MENU key as often as necessary, until you leave the OSD menu.

• If you do not carry out any adjustments within 10 seconds, the OSD menu is left automatically.

Adjusting volume:

☞ Briefly press the MENU key one or more times until the "Volume" option is activated.

☞ Adjust the volume of the built-in loudspeaker with the + and – keys on top of the display.

Without entering the OSD menu:

☞ Press the + or – key on top of the display and adjust the volume.

– The display automatically enters the "Volume" menu.

Adjusting brightness:

☞ Briefly press the MENU key one or more times until the "Brightness" option is activated.

☞ Adjust the brightness of the display with the + and – keys on top of the display.

Selecting display mode:

☞ Briefly press the MENU key one or more times until the "DisplayMode" option is activated.

☞ Select between FullScreen (16:9) and Normal (4:3) with the + and – keys on top of the display.

Additional settings

The display provides different additional settings you can adjust in the Setup menu:

- ❑ Automatic brightness control on/off ("Bright.Contr.: Auto/Auto off")
- ❑ Adjustment of the display brightness depending on the mounting position ("Mount.Pos.: high/low").
- ❑ Built-in loudspeaker on/off ("Loudspeaker: on/off")

Note: If the loudspeaker is switched off, it will automatically be switched on again, as soon as you adjust the display volume.

Enter/exit setup menu:

☞ Press all three keys on top of the display at the same time.

– The setup menu is shown.

☞ Press the MENU key one or more times until the desired setting is activated.

☞ Adjust the desired setting.

☞ Briefly press the MENU key as often as necessary, until you leave the setup menu.

Automatic brightness control

If you set the brightness control ("BrightContr.") to "Auto" the display brightness is automatically adjusted to the surrounding light conditions (see "Additional settings").

With the "Brightness" option of the OSD menu you can adjust the maximum and minimum brightness of the display.

☞ During daylight adjust the maximum brightness ("Brightness Day") of the display as described above.

☞ During darkness adjust the minimum brightness ("Brightness Night").

– The brightness is then adjusted between these two limits depending on the surrounding light.

• If the automatic brightness control is switched off, the display shows "Brightness Auto OFF" in the OSD menu.

TV/Video input

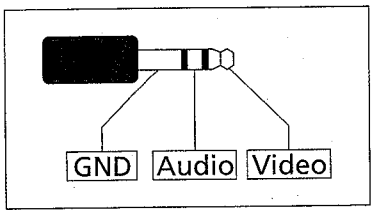
The wide screen display enables you to connect an optional PAL video source like a video recorder, video camera or TV tuner via a 3,5 mm Stereo jack to the TV/Video input (1 in fig. 2a).

As soon as a video source is connected to the TV/Video input the display automatically switches to this source.

Then the following adjustments are available for the TV/Video input:

- ❑ Volume
- ❑ Brightness
- ❑ Contrast
- ❑ Color
- ❑ DisplayMode. The following formats are available:
  - Normal (4:3)
  - Full Screen (16:9)
  - Cinema
  - Wide 1
  - Wide 2

Connection details TV/Video input



GND: Ground, Audio and video

Audio: Audio signal input

Video: Video signal input (PAL)

Standard 4:3 display, Fig 2b

The standard display is equipped with two thumb wheels for volume and brightness control located on top of the display housing.

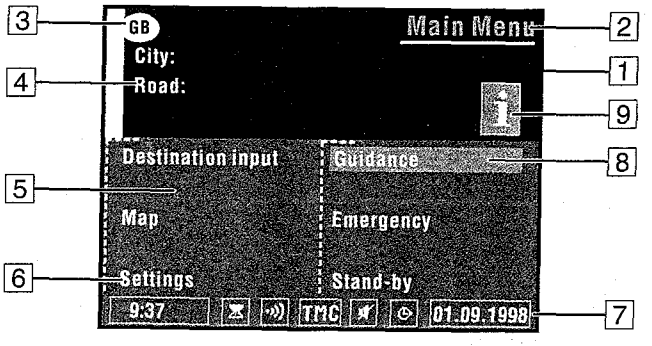
☞ For adjustment of the screen brightness use the "BRIGHT" thumb wheel.

☞ For volume adjustment of the built-in speaker use the "VOL ◢" thumb wheel.

- We recommend to adjust the "VOL ◢" thumb wheel on the monitor to its mid position to minimise distortion of the built-in speaker (see page 3, Fig. 2).
- The thumb wheels "COLOR" and "TINT" have no function.

THE CARiN MENU SCREEN

The CARiN Navigation System menus are based on the following screen layout:



1 **Information window**

2 **Menu title**

3 **Country code** of the inserted map CD

4 **Destination address**. See "Destination Input", page 18.

5 **Input window**

6 **Menu options**. Highlighted options can be selected. Options which are currently not available are skipped automatically.

7 **Status line.** The following information is available to be displayed on the left or right of the status line:
- Clock;
- Date;
- Estimated time of arrival (for example "✳ 9:28");
- Remaining travel time (for example "–> ✳ 0:46h").

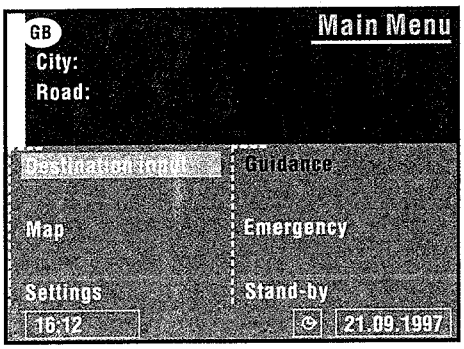
Further information that is always displayed by the system:
- ⧗ : hour-glass (system is calculating; for example during route planning);
- •)) : command is received from the remote control;
- ▭ : the batteries in the remote control need replacing;
- TMC : status of the Traffic Message Channel (only if a TMC radio is connected).
- 🔇 : audible info (voice messages) disabled;
- ⏲ : route planning criteria;

For further information on configuration of the status line see "System Settings", page 38.

8 **Cursor.** Move with the cursor keys ◄, ►, ▲ and ▼ on the remote control. Press **ENTER/O.K.** key to confirm selection.

9 **info icon.** Travel guide data on special destinations (hotels, restaurants, tourist attractions, etc.) is available on the inserted map CD.

MAIN MENU



After switching on the ignition and confirming the safety notification the Main Menu appears. Acquaint yourself with the CARiN functions by selecting menu options and watch the reaction of the system. Don't be afraid, you can't damage the system that way.

☞ Pressing the **MENU** key brings you back directly to the Main Menu from any other menu.

☞ Move the cursor (highlighted field) with the cursor keys ◄, ►, ▲ or ▼ to the desired menu option.

☞ Confirm your selection with the **ENTER/O.K.** key.

- The cursor automatically skips options which are not available (for example, "Guidance" if you didn't specify a destination address).

You can select the following menu options in the Main Menu:

❑ **Destination input:** Enters the Destination Input menu. Select this option to enter the city, road, junction or the special facility of the destination you want to travel to. See page 18.

❑ **Map:** Offers you a map with the area around the current car position.

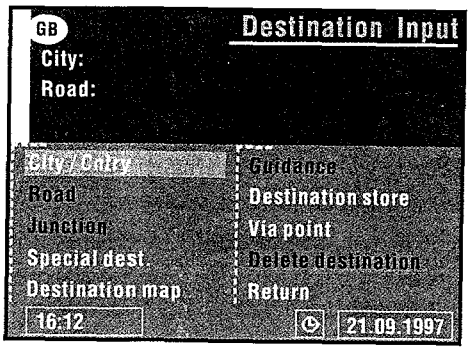
❑ **Settings:** Enters the System Settings menu. Select this option to set your own preferences. See page 38.

❑ **Guidance:** Enters the guidance screen and activates the guidance function (only if a destination address is entered). See page 25.

❑ **Emergency:** Enters the Emergency menu to show you the current car position and the emergency phone number. See page 32.

❑ **Stand-by:** Switches off the display screen.

DESTINATION INPUT



☞ Select "Destination input" from the Main Menu.

– The Destination Input menu is presented.

The following options are available:

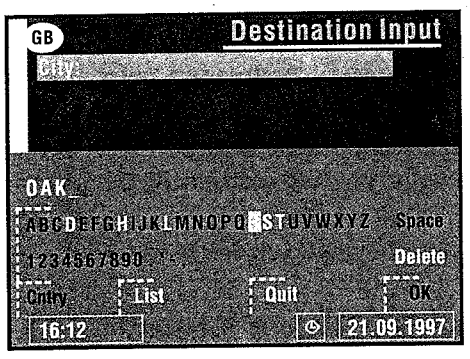
- ❑ **City / Cntry:** Enter the city name (and the country)* of the destination address.
- ❑ **Road:** Enter the road name (optional).
- ❑ **Junction:** Enter a junction for a more precise selection (optional).
- ❑ **Special dest.:** Select a destination address from a list of facilities of general interest (airports, hotels, restaurants, filling stations, etc.)
- ❑ **Destination map:** Enter a destination by means of a map.
- ❑ **Guidance:** Goes to the guidance screen and activates the guidance function.
- ❑ **Destination store:** Store destination addresses in the address book and recall the last used destination addresses.
- ❑ **Via point:** Enter via points on the way to the current destination address.
- ❑ **Delete destination:** Delete the last entered destination address.
- ❑ **Return:** Back to the Main Menu.

* If more than one country is stored on the inserted map CD. The country code of the selected country is shown in the information window of the screen.

You can enter the destination address in different ways:

1. Letter-by-letter by means of a "typewriter";
2. Select a list entry from the database on the map CD;
3. Select a special destination (hotels, filling stations, etc.) from the map CD;
4. Input by means of a map and crosshairs.

1. Direct entry of the destination address



With the "typewriter" you can enter the city, the road and the junction of the destination address letter by letter.

☞ Select "Destination Input" in the Main Menu.
– The Destination Input menu appears.
☞ Select "City / Cntry".
– The typewriter window is opened.
☞ If the country in which the destination address is situated is not the same as shown in the country code on the display screen, first select "Cntry" from the typewriter window and select the desired country from the list. (This is only possible if more than one country is stored on the inserted map CD.)
☞ Enter the city name.
☞ To delete characters previously entered, select "Delete" and confirm by pressing **ENTER/O.K.**.
☞ To enter a space select "Space".
☞ If you know the destination address exactly, enter the road and junction the same way. For this use options "Road" and "Junction" in the Destination Input menu.
• It is sufficient, if you only enter the city name. The navigation system then guides you to the city boundary.
☞ Select "Guidance".
– The guidance screen appears.
– The system plans a route to the entered destination address.

Features of the data base

- If you use the "typewriter" the previously entered characters are compared with all database entries. You can only select valid characters (highlighted) now. If there is a unique entry in the database, the system completes the name automatically.
- If there is more than one database entry with the same name, the cursor is automatically placed on "List". Select the desired entry from the list. If the number of data entries is very large, setting up the list may take a few seconds.
- Database entries which are not unique are distinguished by additional information.
  If for example a road name is not unique in the city entered before, a list of all district names referring to this road is presented.
- For several roads house numbers are available in the data base. When entering the road name with the typwriter you can also enter the desired house number.
- If you wish to enter a name with the German character "ß", select the "S" twice. The data base also accepts this spelling.
- Depending on the map CD inserted the data base also accepts the spelling of other languages. For example, you can enter "MUNICH" or "MUNCHEN" instead of "MÜNCHEN".

2. Selecting the destination from database entries

Select the city, road and junction directly from a list of database entries.

☞ Select "City / Cntry", "Road" or "Junction" from the Destination Input menu.

☞ Enter the initial letters of the desired city, road or junction with the "typewriter".

☞ Select "List" from the typewriter window.

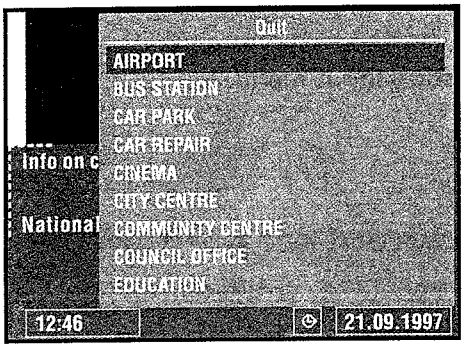
– A list of entries beginning with the characters entered is displayed.

- Without entering an initial letter the list starts with the first alphabetically sorted database entry.

☞ Select the desired list entry.

☞ To abort the data entry select "Quit" from the list.

3. Special destinations



Select a special facility (airports, hotels, filling stations, garages, etc.) as your destination address. Special destinations are stored on the map CD.

GB

Special destinations related to the destination address

If you are looking for special destinations situated near your destination address:

☞ Select "Special dest." from the Destination Input menu.

☞ Select "Info on dest.".

– A list of categories specifying the special facilities is presented.

- For small cities and villages usually only the option "CITY CENTRE" is available.
  If you choose this option, you will be guided to the centre of the city or village.

☞ Select the desired category (for example HOTEL, PETROL STATION, ...)

- If a larger number of facilities is available in the database, the typewriter is shown.

☞ Enter the name of the desired facility or select "List".

☞ Select the desired facility from the list.

- If travel guide information on special destinations is stored on the map CD, the info icon is displayed in the information window of the Main and Destination Input menu. In this case a special screen with additional information is shown. For further details read the section "Map CDs with travel guide information".

Facilities of national importance

If you are searching for facilities of national importance (for example AIRPORT, FERRY, etc.):

☞ Select "Special dest." from the Destination Input menu.

☞ Select "Nation. importance".

☞ Proceed as described previously.

Facilities located around the current car position

If you are searching for facilities in the vicinity of the current car position:

☞ Select "Special dest." from the Destination Input menu.

☞ Select "Info on car pos.".

– A list of categories specifying the special facilities located around the current car position is presented.

☞ Proceed as described previously.

- In the list of special facilities an arrow behind the list entry shows you the direction to where the destination is located. In addition the distance to the destination is shown.
- The special facilities are sorted in order of their distance from the current car position, i.e. the nearest facility is on top of the list.

Facilities outside the digitized area

With some map CDs it is possible that the roads leading to a special facility you previously selected are not or only partly digitized on the map CD.

- As far as the roads are digitized CARiN will guide you in the direction of your destination. As soon as you leave the digitized area CARiN will show you a map with the area around your current position as well as the directional arrow and the distance to the destination.

Map CDs with travel guide information

You can recognize map CDs containing travel guide information by the info icon in the information window. If you have inserted such a map CD, you can get additional information on many of the stored special facilities.

You can for example find out the room rate when looking for a hotel and recall the phone number for reservation.

If you wish to have the selected facility as a destination:

☞ Move the cursor onto the address.

☞ Press **ENTER/O.K.**.

☞ Then select "Activate".

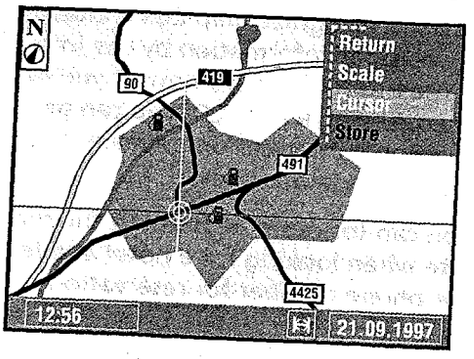
– The selected facility is stored as the new destination address for guidance.

☞ Select "Return" if you do not wish to store the selected facility as the destination address.

– The display again shows the list of special destinations.

When using map CDs with travel guide information, additional screen icons may appear in the map display. You can find the description of these icons in the booklet supplied with the map CD.

4. Destination input by map



Select the destination address by means of a map. Destination input by map is only possible when the car speed does not exceed 30 km/h.

☞ Select "Destination map" or press the **MAP*** key in the Destination Input menu .

– A map with the area around the specified destination address is shown.

• If no destination was entered before, a map with the area around the current car position is displayed.

☞ Press one of the cursor keys or the **ENTER/O.K.** key.

– A menu with the following options is shown in the display:

❑ **Return:** Return to Destination Input menu.

❑ **Scale:** To change the map scale.

❑ **Cursor:** To activate the movement of the horizontal and vertical line of the crosshair.

❑ **Store:** To store the selection as the new destination address.

• If you don't press a key within 3 seconds the menu closes automatically.

☞ Activate the crosshair cursors by selecting "Cursor".

☞ Move the crosshair with cursor keys to the desired position.

• The map is automatically shifted if you move one of the crosshair lines to the edge of the screen.

☞ To store the selected location as the destination address press **ENTER/O.K.** and then select "Store" from the menu.

• Storing a destination address from the destination map is only possible with map scales 100 m, 200 m, 500 m and 1 km.

TIP: First select a large map scale for a coarse specification of the destination. Then choose a smaller scale for exact determination and storage of your destination.

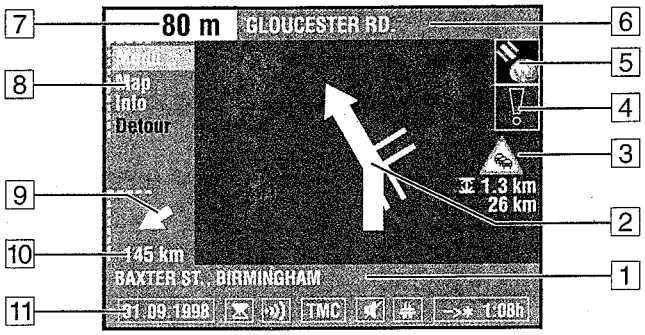
Special facilities are displayed as icons in the destination map. The number of displayed facilities depends on the map scale and on the availability of these facilities in the database. You can find the explanation of these screen icons in the table at the end of these instructions.

* only certain versions

Guidance screen

Once you select "Guidance" the guidance screen appears. If you enter a new destination address it may take some time before the first guidance advice is shown. The navigation system plans the route. During route planning the egg-timer appears in the status line.

The following information is shown in the guidance screen:



1 Current car position. Road name, city name and village name if stored in the database.

2 Visual guidance advice. Diagram of the next junction or turning. In addition, direction changes are announced by voice messages.

3 Shows a preview of the next traffic obstruction on the planned route (appears only if a RDS TMC radio is connected and if TMC announcements are available for the planned route)

4 Warning note. You are in an area with limited road information.

5 GPS reception status. As soon as valid position data is received by the GPS receiver the colour of the satellite icon is green.

6 Turn into street. Road you have to turn into next.

7 Distance to the next direction change *.

8 Options menu: "Menu" (goes to the Main Menu), "Map" (shows the route map), "Info" (opens the Route Information menu) or "Detour" (opens the detour menu if an obstruction is ahead; only if a RDS TMC radio is connected, see page 29.)

9 Target direction arrow. Shows the airline direction to the selected destination.

10 Distance to the destination* (real driving distance as soon as a route is planned).

11 Status line.

* The measuring units are dependent on the system settings.
See chapter "System Settings", page 38.

Voice messages

As soon as you activate the guidance function CARiN will give you acoustic guidance advice in addition to the diagrams in the guidance screen.

You didn't hear one of the voice messages?

☞ Press the **REP** key on the remote control.

– The current guidance advice is repeated as long as it is valid.

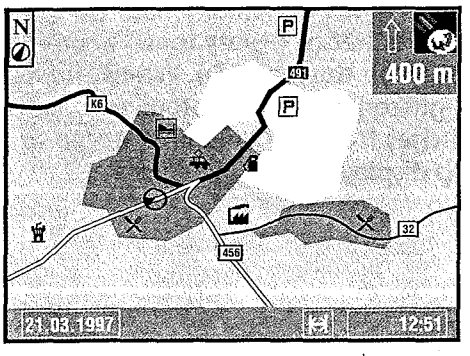
Route information

Select "Info" from the guidance screen to open the Route Information menu.

The following menu options are available:

- **Route list:** Shows a list of all sections of the planned route. (Only if you are on a digitized road.)
- **Next via point:** Shows the next via point and gives you the opportunity to delete this via point.
- **Route selection:** To select the route planning criteria. See also page 38.
- **Return:** Back to the guidance screen.

Guidance with route map



If you choose the option "Map" in the guidance screen, the route map appears on the display. The car position is shown as a circle with a directional arrow. The planned route is shown white.

In addition a simplified plotting of guidance advice and the distance to the next advice are shown in the upper right corner of the screen.

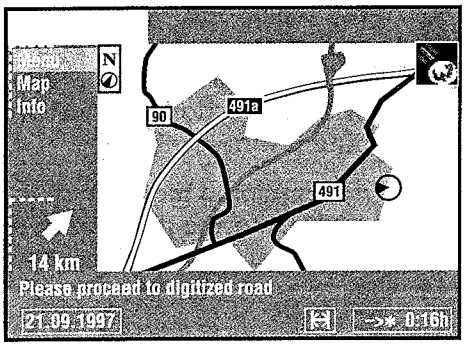
GB

☞ Press one of the cursor keys or the **ENTER/O.K.** key to open a menu with the following options:

- **Return:** Back to the guidance screen.
- **Scale:** Changes the scale of the map. Confirm "Scale" with the **ENTER/O.K.** key and change the scale with the cursor keys ◀ or ▶. Confirm the new scale with the **ENTER/O.K.** key.
- **Positioning:** Selects the orientation of the map ("Northwards" or "Steer dir."). The map is displayed in "Steer dir." mode only if the map scale is 100 m, 200 m, 500 m or 1 km.
- **TMC info:** Selects the kind of TMC announcements which are displayed on the map (only if a RDS TMC radio is connected).

• Approx. after 3 seconds the menu is automatically closed, if you don't press a key.

Guidance in partly digitized areas



In rural areas and smaller cities it is possible that not every road is digitized (stored on the map CD). When you leave a digitized road, the system automatically switches from the guidance screen to map display with "500 m" scale.

☞ In this case drive in the direction of the calculated route (shown in white on the map) or to a digitized road.

- As soon as you reach a digitized road the system switches back to guidance and plans a new route.

Areas with limited road attributes

In some areas not all attributes of a road are availbale on the map CD. For example the driving direction of a one way street or the information about the prohibition of entry of a pedestrian precinct may be missing.

If you are entering this kind of area the navigation system will show a warning. The local traffic regulations always have priority over the advice given by the navigation system. Always obey road signs and traffic regulations.

Automatic re-routing

The system automatically plans a new route within a few seconds if you don't wish to follow a guidance advice, you missed an advice or it is not possible to follow it due to traffic demands.

Adjustment of the average speed setting

For calculation of the remaining travel time and the estimated time of arrival, the navigation system uses the average speed of a car by default. Should the displayed times (time of arrival or remaining travel time) differ from reality you can adjust the average speed. This may be necessary if you want to use your navigation system in a lorry.

For more information please read section "System information" in chapter "System Settings".

Dynamic Guidance with TMC traffic information

(only with RDS TMC radio connected)

With the RDS Traffic Message Channel (TMC) you always have an overview over the actual traffic situation on your route. In combination with an optional Philips Car Systems RDS TMC radio the navigation system shows you where accidents, traffic jams or roadworks are.

During guidance CARiN informs you about all traffic obstructions covered by TMC and occuring on your route ahead. When you get closer to the obstruction the "Detour" option becomes active and CARiN plans a detour if you wish to take it.

TMC voice messages

If an RDS TMC radio is connected to your CARiN system, all TMC announcements on your route ahead will be announced by voice messages.

Repeating a TMC voice message

☞ Press the **REP** key on the remote control.

– You hear the actual guidance advice and the latest TMC announcement.

Displaying TMC traffic information

☞ Switch on the radio.

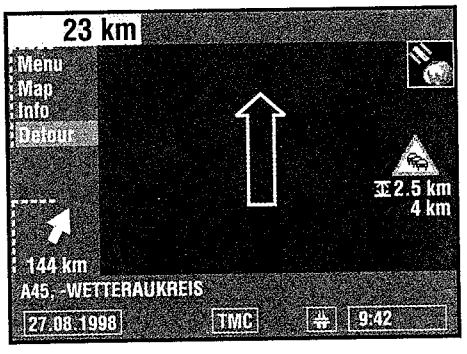
☞ Switch on the TMC mode on the radio (see radio manual).

☞ Tune to a station broadcasting TMC information (see radio manual).

– The status line of the CARiN display shows the state of the TMC:

- **TMC icon yellow:** The tuned station broadcasts TMC information.
- **TMC icon red:** The tuned station does not broadcast TMC information.
- **TMC icon grey:** The inserted map CD does not support TMC functions.

TMC traffic information on the guidance screen

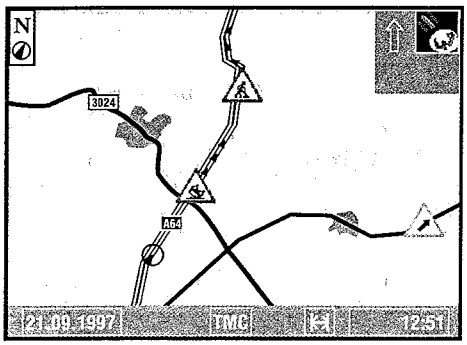


If a traffic obstruction is ahead on your route, this obstruction will be announced by an icon at the right margin of the guidance screen. Additionally the length of the obstruction (for example: 2.5 km) and the distance to the obstruction are shown.

You can find a description of the icons on page 47.

TMC is not yet implemented in all countries and is not supported by all RDS broadcasters.

TMC traffic information with map display



☞ Select "Map" from the guidance screen, or

☞ Select the car position map with the "Map" option in the main control menu, or

☞ Press the **MAP** key*.

The display shows the map with the latest TMC traffic information, when traffic obstructions exist within the displayed area.

- With small map scales (for example 20 km, 50 km and 100 km) you see the traffic situation as an overview.
- With larger scales the situation is shown in detail.
- Traffic obstructions which are ahead on your route are shown with a red border, obstructions off the route are shown with a grey border.
- For traffic obstructions off the route arrows may indicate the driving direction for which the obstruction is valid.

Detailed information

Traffic obstructions covering a certain distance are displayed with driving direction and length on larger map scales, for example slow-moving, queuing or stationary traffic, etc.

The traffic density (slow-moving, queuing or stationary traffic) and the length of the obstruction is marked by arrows.

Selecting the TMC information

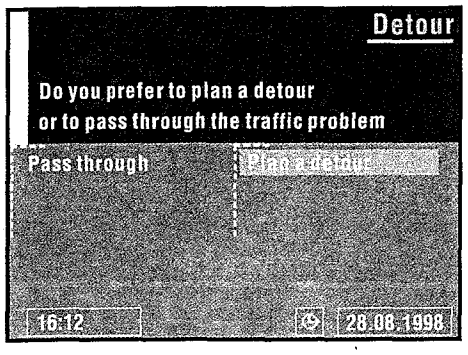
You can select which kind of TMC events (icons) are shown.

☞ Select "TMC events" from the route map (guidance map).

☞ Select the categories you want to be shown.

- Urgent danger events cannot be switched off.

Bypassing traffic obstructions



CARiN will inform you if you are approaching the last exit before a traffic obstruction and gives you the opportunity to plan a detour.

GB

As soon as a traffic obstruction is ahead and the "Detour" option is active in the guidance screen:

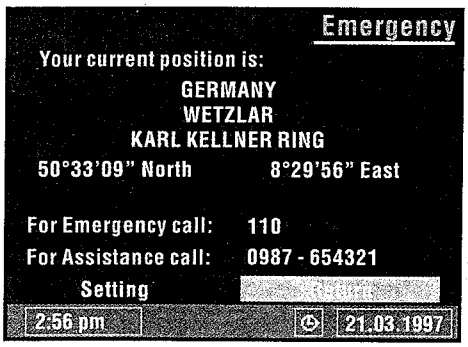
☞ Select "Detour" in the guidance screen or press the **ALT-R** key.

– The "Detour" menu appears.

☞ Confirm "Plan a detour", if you wish to bypass the traffic obstruction.

– CARiN plans a detour within a few seconds.

☞ Select "Pass through" if you want to pass through the obstruction.



☞ Select "Emergency" from the main menu to enter the Emergency menu.

The Emergency menu shows you the following information:

- ❑ The current car position with country, city, road and the longitude and latitude position determined by the received GPS data;
- ❑ The country-specific emergency phone number;
- ❑ A user-programmable Assistance phone number.

- The Emergency function determines the car position to within an accuracy of approx. 30 m.

⚠ The country, city and street name are only displayed if you travel within the boundaries of the map CD currently loaded. If no CD or the incorrect CD is loaded, only your current longitude and latitude co-ordinates will be displayed, as long as the Global Positioning System is operating properly.

⚠ The country-specific Emergency phone number is only displayed if you travel within the boundaries of the currently loaded map CD.

Storing an Assistance number

You can store a telephone number of your own choosing in the Emergency menu, for example the number of a breakdown service, automobile club, etc..

☞ Select "Setting" from the Emergency menu .

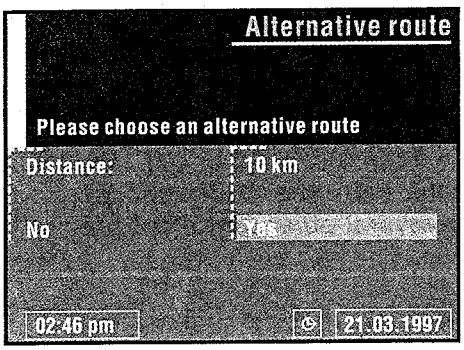
– The typewriter window is opened.

☞ Enter the telephone number you want to store for assistance.

☞ Select "OK" from the typewriter window to confirm your entry.

– The stored number appears in the Emergency menu.

☞ To leave the Emergency menu select "Return" or press the **MENU** key on the remote control.



You can have the navigation system to calculate an alternative route during guidance for an adjustable distance.

Use this function for example to **get around traffic jams** or if you don't agree with the current route planning.

The alternative route is calculated from the current car position for the selected distance.

☞ Briefly press the **ALT-R** key.

– The Alternative route menu is shown, the cursor is placed on "Yes".

☞ If you agree with the displayed distance, simply confirm with the **ENTER/O.K.** key.

☞ If you want to change the distance, move the cursor to the distance data and confirm with the **ENTER/O.K.** key.

☞ Select the desired minimum distance with the cursor keys between 1 and 10 km for the alternative route.

☞ Confirm the selected distance by pressing the **ENTER/O.K.** key.

☞ Confirm the procedure by selecting the option "Yes".

– Within a few seconds an alternative route is calculated for the chosen distance.

☞ If you want to cancel the procedure, select "No" or press the **MENU** key.

Even without the alternative route function the navigation system plans a new route automatically when you leave the advised route.

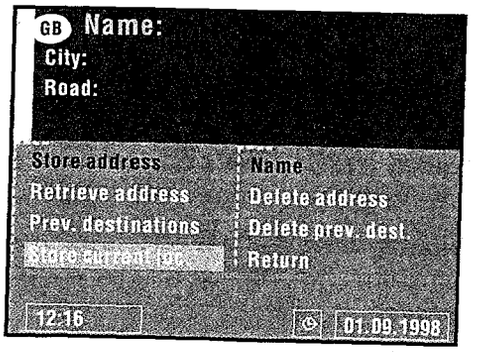
☞ Simply leave the advised route to bypass traffic jams or to drive a route of your choice. CARiN will automatically calculate a new route within a few seconds.

Note*: The **ALT-R** key has a different function as soon as you approach a traffic obstruction and the "Detour" option is active in the guidance screen.

In this case pressing the **ALT-R** key directly leads to the "Detour" menu.

* Only if a RDS TMC radio is connected to the navigation system.

DESTINATION STORE



The CARiN Navigation System allows you to store 30 destination addresses in a personal address book. Therefore the system has a non-volatile memory. This is useful for addresses you frequently use.

Furthermore the destination store offers you several other useful options.

☞ Select "Destination store" from the Destination Input menu.
– The destination store menu is shown.

The following menu options are available:

- ❑ **Store address:** Store a destination address in the personal address book.
- ❑ **Retrieve address:** Recall a destination address previously stored in the personal address book.
- ❑ **Prev. destinations:** Load one of the 10 destinations last used for guidance.
- ❑ **Store current loc.:** Store the current car position in the address book.
- ❑ **Name:** Enter a name for the destination address (consisting of max. 10 characters).
- ❑ **Delete address:** Delete an entry from the personal address book.
- ❑ **Delete prev. dest.:** Delete the 10 destination addresses last entered.
- ❑ **Return:** Leave the destination store menu.

Notes:

- The number of 30 entries is the guaranteed minimum for the personal address book. The number of entries can increase up to 100 dependent on the kind of information stored (with or without name, etc.).
- If no address is stored in the address book, the "Retrieve address" option cannot be selected.
- If the memory is full, the "Store address" option can no longer be selected.

Store addresses in the address book

If you have not entered a destination address yet:

☞ Enter the desired data (city, road, junction or special facility) of the desired destination address in the Destination Input menu.

☞ Select "Destination store" from the Destination Input menu.

☞ If you like you can enter a name for the destination address. Select "Name" and enter up to a max. of 10 characters.

– The entered name is now shown as the new menu title.

☞ Select "Store address".

– The address is now stored in the address book under this name.

– The menu title now changes back to "Name:".

Retrieve addresses from the address book

☞ Select "Retrieve address" from the destination store menu.

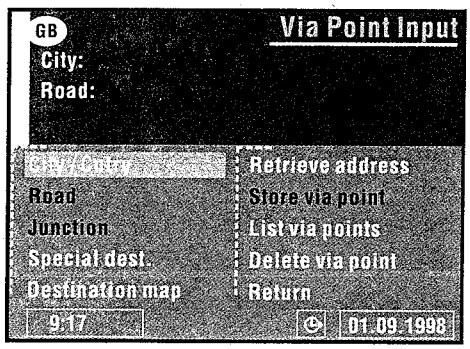
– The list of all addresses already stored in the address book is shown.

• The list is sorted in alphabetical order.

☞ Select the desired address from the list.

– The selected address is accepted as the new destination address.

VIA POINTS



If you like to pass by certain places on the way to your destination address, you can store these as via points. The navigation system then calculates the route in a way that the via points are passed in the stored order before reaching the destination address.

☞ Select "Via Point" from the Destination Input menu.
– The Via Point Input menu is shown.

The following options are available:

- **City / Cntry:** To enter the city name (and the country) of the via point.
- **Road:** To enter the road name. Don't enter a road name, if you only want to travel through the desired city.
- **Junction:** To enter a junction for more precise selection (optional).
- **Special dest.:** To select a via point from a list of facilities of general interest (airports, hotels, restaurants, filling stations, etc.).
- **Destination map:** To enter a via point by means of a map.
- **Retrieve address:** To load an address from the address book as a via point.
- **Store via point:** To store the entered via point in the memory.
- **List via point:** To show the list of stored via points.
- **Delete via point:** To delete a via point from the memory.
- **Return:** To return to the Destination Input menu.

Notes:

- The maximum number of stored via points is 25.
- The via points are reached in the order of entry.
- You can enter new via points at any time on the way to your destination address.
- When you have passed a certain via point, it is deleted from the list of via points.
- If you delete a destination address, CARiN asks you if you would also like to delete the list of via points. If you answer "No", the stored via points are kept for the new destination address.

Store via points

☞ Select "Via Point" from the Destination Input menu.
– The Via Point Input menu is shown.
☞ You can enter the via point in the same way as the destination address. Or you can select a special destination, load an address from the address book or use the destination map for help.
☞ Then select "Store via point".

List via points

☞ Select "List via point".
– The list of stored via points is shown.

Delete via points

☞ Select "Delete via point".
– The list of stored via points is shown.
☞ Select the via point you want to delete.
• A security check prevents you from deleting via points by mistake.
– If you select "Yes", the selected via point is deleted from the memory.

TIP: Delete all via points without deleting the current destination address.

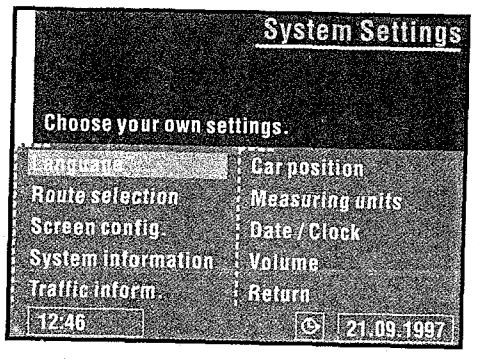
If you have already stored the current destination address in the address book, skip the first point.

☞ Store the current destination address in the address book.
☞ Select "Delete destination" from the Destination Input menu.
☞ Confirm the security check "Delete via points?" with "Yes".
– All via points and the destination address are deleted.
☞ Load the last used destination address with "Retrieve address" from the destination store menu.

Bypassing via points

During guidance you can decide whether you want to reach the next via point or to bypass it. If you want to bypass the next via point:

☞ Select "Info" from the guidance screen.
☞ Then select "Next via point"
– The menu "Next via point" is shown.
☞ Select "No".
– The displayed via point is bypassed and deleted from the list of via points.



To adjust the navigation system to your own preferences you can modify many settings.

☞ Select "Settings" from the Main Menu.

– The System Settings menu is shown.

The following options are available:

Language

To select the language for acoustical advice and menu text on the display. Languages can be loaded from the supplied language CD.

☞ Select "Language" from the System Settings menu.

☞ Follow the instructions on the screen.

The following languages with a variety of different speakers are currently available on the language CD:

- ❑ British English
- ❑ American English
- ❑ French
- ❑ German
- ❑ Dutch
- ❑ Italian
- ❑ Spanish
- ❑ Danish
- ❑ Swedish

Route selection

To select the criteria which influence the route planning. You can select between these four options:

- ❑ **Optimised for travel time** ◷
  (good compromise for any situation)
- ❑ **Optimised for travel distance**
  (recommended for routes within a city)
- ❑ **As much as possible along main roads**
  (recommended, if travelling on main roads is preferred)
- ❑ **As little as possible along main roads**
  (recommended, if travelling on main roads is not preferred)

You can also modify the route selection during guidance. For that purpose select "Info" from the guidance screen.

Furthermore you have the opportunity to minimize the use of toll routes for route planning:

☞ Select the "Minimize toll routes" option, if you want to minimize the use of toll routes.

- If no toll-free roads are available for route planning, toll roads will be used.

Note: If the "Minimize toll routes" option is activated, route planning may take longer than without this function activated. Therefore it is recommended to use this function only if it is necessary.

Screen configuration

In this menu you can select a variety of colour combinations for screen display and the information shown in the status line of the screen.

The Screen Settings menu offers you the following options:

Day colour

Select one out of nine colour combinations for the daytime display.

- Optimized contrast is guaranteed by the options Blue, Green and Red.

This setting is active when the headlights are turned off.

Status line left

Select the kind of information shown in the lower left corner of the screen:

- **None:** Status line left switched off.
- **Clock:** Time display.
- **Date:** Date display.
- **Remaining travel time:** Time remaining until you arrive at the next via point or the destination address (if no via points were entered) calculated by CARiN.
- **Estimated time of arrival:** Time you will arrive at the next via point or destination calculated by CARiN.

Note: For calculating the estimated time of arrival and remaining travel time the system uses an average travel speed. You can adjust this speed to your real average speed by selecting the "System information / Speed correction" option.

Night colour

Select one out of nine colour combinations for the night-time display.

- Optimized contrast is guaranteed by the options Dark blue, Dark green and Dark red.

This setting is active when the headlights are turned on.

Status line right

Select the kind of information shown in the lower right corner of the screen. See "Status line left" for available options.

System information

The System Information menu offers the following options:

- **Diagnosis:** To analyse soft- and hardware problems (code protected).
- **Default settings:** To reset all user specific settings (status line, screen colours, etc.) to their factory settings.
- **Configuration:** Information on soft- and hardware versions of the system (for service purposes).
- **Speed correction:** To adjust the average speed setting. Influences the calculation of the remaining travel time and the estimated time of arrival.

⚠ **WARNING:** The "Diagnosis" option should only be performed by an authorized service centre for service purposes.

Traffic information

The Traffic Information menu offers the following options:

- **TMC Info On/Off:** Activate/deactivate the display of all categories of TMC traffic information at the same time.
- **Message selection:** Select the type of TMC information by category (selecting cathegories one by one, otherwise same function as above).
- **Dyn.Guid. On/Off:** Activate/deactivate dynamic guidance by TMC i.e. gives a warning when approaching the last exit before the obstruction, plans a detour, etc.)
- This option appears only if a RDS TMC radio is connected.
- You can find the explanation of the TMC icons on page 47.

Car position

The Car Position Input menu allows you to enter a new car position manually (for example for demonstration purposes).

Measuring units

To select the measuring units for distance display. The following measuring units are available:

- **Metric:** Display in kilometres and metres;
- **Anglo:** Display in miles and yards;
- **American:** Display in miles, tenths of miles and feet.

Date / Clock

The Date/Clock Configuration menu allows you to set the date and time format as well as the time zone.

- **Time format:** Select between 12 hour format and 24 hour format.
- **Set time zone:** Adjust the difference between your local time and **U**niversal **T**ime **C**o-ordinates (time received by CARiN via GPS) with the cursor keys ◄ and ►.

Time:	Standard	Daylight Saving
Greenwich Mean Time (London)	0.0	+ 1.0
Central European Time (Paris, Berlin)	+ 1.0	+ 2.0

- **Date format:** Select between "day.month.year" and "month/day/year".

Volume

If you select "Volume" the Volume Control menu with the following options are shown:

- **SDVC:** Select one of the SDVC curves for Speed Dependent Volume Control. This is to compensate the surrounding noise by increasing the volume level depending on the car speed. Find a suitable compensation by trying out the different curves.
- **Audible info (Voice on/off):** To activate / deactivate the acoustical guidance advice.
  The icon appears in the status line if the voice option is set to "off".
- **Volume:** To adjust the volume level of acoustical advice. Place the cursor on option "Volume" and confirm by pressing the **ENTER/O.K.** key. A volume slider is shown. Adjust the desired volume with the cursor keys ◄ and ►. Press the **ENTER/O.K.** key again to store this setting.

MAP CDs

The CARiN Navigation System is based on a database stored in a special format on a CD. It is recommended always to use the latest update of this map CD.

If you travel to different countries or you wish to have more detailed information on a special area, ask your dealer for a suitable map CD.

- Only use genuine CARiN map CDs. The Navigation System will only work with CARiN map CDs.
- The CD player of the navigation system does not play any other CDs (i.e. Audio CDs).
- Always store map CDs in their protective cases.
- CARiN map CDs are exclusively designed for use with the CARiN system and they are only readable by a CARiN Navigation System.

Changing the map CD (Fig. 3, page 3)

☞ Press the ⏏ key on the navigation computer once if the red power LED is on (normally when the ignition is switched on).

☞ Press the ⏏ key twice if the red power LED is not on.

– The CD is ejected.

☞ Take out the CD and gently insert the new CARiN map CD with the printed side facing up until it is retracted.

- The system needs a few seconds for initialisation after changing the map CD.

Note:

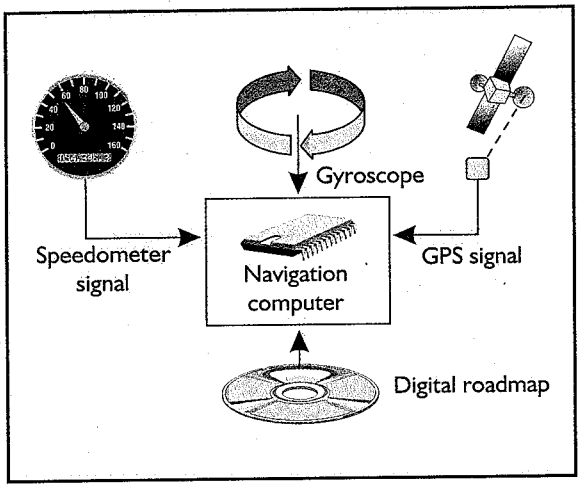
- If the last entered destination address is not (or only partly) on the new map CD you have inserted, the entire reference to this previous address or parts of it will be deleted.

MAINTENANCE

Cleaning of the remote control and the display

Do not use lighter fluid, methyl alcohol or other solvents for cleaning. Only use a damp cloth.

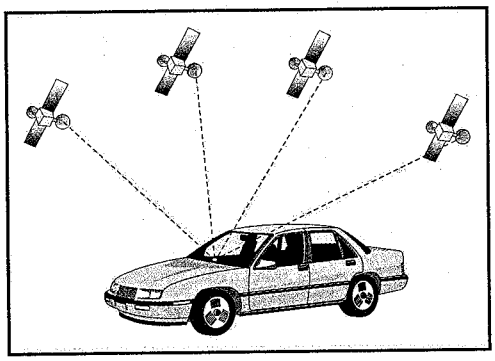
Determination of the vehicle position



The movement of the vehicle is measured by sensors that are integrated in the CARIN system. The distance driven is recorded by an **electronic signal from the speedometer** and the rotary movements of bends by the **gyroscope** (a rotary measurement system). The information from these sensors is, however, not always exact as the values can be affected by skidding of the wheels, varying tyre pressure due to changes in temperature, etc.

By comparison of these signals with the digitized map it is possible to correct any inaccuracies of the sensors and to determine the position of the vehicle quite precisely. In order to correct the data, signals from a number of **GPS satellites** are required for a period of several minutes.

GPS (Global Positioning System)



The GPS System is based on the reception of navigation signals from a total of 24 GPS satellites at a height of 21.000 km.

To determine the position with sufficient accuracy, signals from at least 4 satellites must be received.

The CARIN GPS receiver can handle up to 8 satellite signals simultaneously. This allows an accuracy of about 30 m to 100 m which is further improved by the other sensors.

When the vehicle is parked for a longer period of time, the satellites move on during this period. Therefore, when the ignition is turned on again it can take a few minutes before CARIN can pick up enough satellites and evaluate the received signals.

- You can recognize that the reception is sufficient by the green symbol that appears in the CARIN display. If GPS reception is not sufficient, the satellite symbol remains red.

When starting up, CARIN may tell you: "You are now leaving the digitized area". The monitored map will then show the vehicle in a position off the road. If there are other roads in this position, CARIN may send inappropriate messages. This means that CARIN supposes the vehicle is on one of the other roads.

- **When the vehicle has been at a standstill for a longer period of time, the CARIN function may be temporarily inhibited. CARIN will operate reliably again once the GPS reception is available in sufficient quality.**

Limited GPS Reception

Functional disturbance may also occur if GPS reception is interrupted or interference occurs over a distance of several miles.

GPS reception may be interrupted or interference occurs :

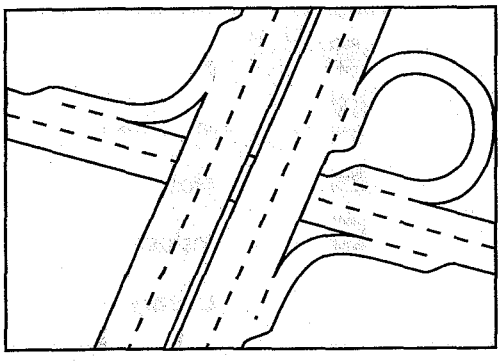
- ❑ In between high buildings.
- ❑ In multi-storey car parks or garages, in tunnels and under bridges.
- ❑ In forests or tree-lined avenues.
- ❑ During heavy rain showers and thunderstorms.
- ❑ In valleys and in mountainous regions.
- ❑ Unfavourable satellite constellations in conjunction with the mounting position of the GPS antenna. In this case GPS reception may be obstructed for a longer period.

If the GPS antenna has been properly installed, sufficient GPS reception should be present about 95 % of the driving time. If interference in the reception occurs more frequently, improper mounting of the GPS antenna may be the cause. In this case, we recommend you to contact your CARIN dealer.

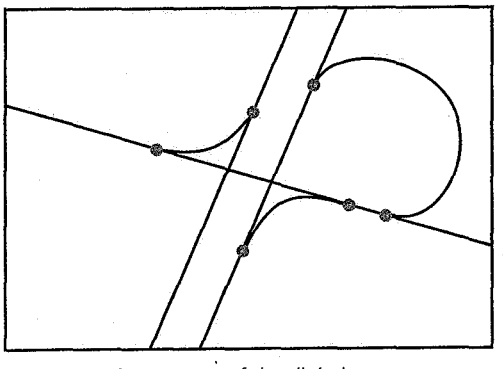
However, the CARiN Navigation Computer is able to compensate reception problems over a period of a few minutes without functional interference.

The digital road map

To plan a route to a destination address not only the current car position is needed by the navigation system but also a digital road map is required where the destination address itself as well as the roads leading to the destination address are stored. This digital road map is located on the CARiN map CD you insert in your navigation computer.



Real road network



Line pattern of the digital map

On the map CD the road network is stored as a line pattern, which means that even extensive junctions have only one central point that all roads lead to. That's why the navigation system indicates the distance to the next turn as the distance to the centre of the junction. Therefore the distance indications for motorway exits given by the navigation system are different from those on the motorway signs. The motorway signs refer to the distance to the beginning of the exit.

Areas with limited road attributes

In some areas not all attributes of a road are available on the map CD. For example information on prohibited turning, one way streets or pedestrian areas are missing.

If you are entering this kind of area the navigation system will show you a warning. The local traffic regulations always have priority over the advice given by the navigation system. Always obey road signs and traffic regulations.

Latest map CDs

Approximately 10-15 % of the traffic network is changing each year. Due to these constantly changing conditions (newly built roads, traffic restrictions, etc.), a 100 % correspondence of the digital roadmap with reality cannot be achieved under all circumstances. We recommend to always use the latest version of the map CD for navigation.

SCREEN ICONS

In the map display different screen icons are shown depending on the amount of data base entries and depending on which category of special location you selected in the destination input menu. These icons have the following meaning:

Icon	Meaning	Icon	Meaning
	Airport		Hire car company
	Amusement park		Hospital
	Cash dispenser		Hotel
	Automobile club		Industrial estate
	Bank		Library
	Bus station		Marina
	Car park		Military base
	Car repair		Monument
	Chemist		Museum
	Church		Park
	Cinema		Park + Ride
	City centre		Petrol station
	Civic centre		Police
	Clinic		Post office
	Council office		Railway station
	Court house		Restaurant
	Destination		Services
	Education		Shopping centre
	Embassy		Sports centre
	Entertainment		Theatre
	Ferry		Tourist attraction
	Fire station		Tourist information
	Golf course		

TMC ICONS

GB

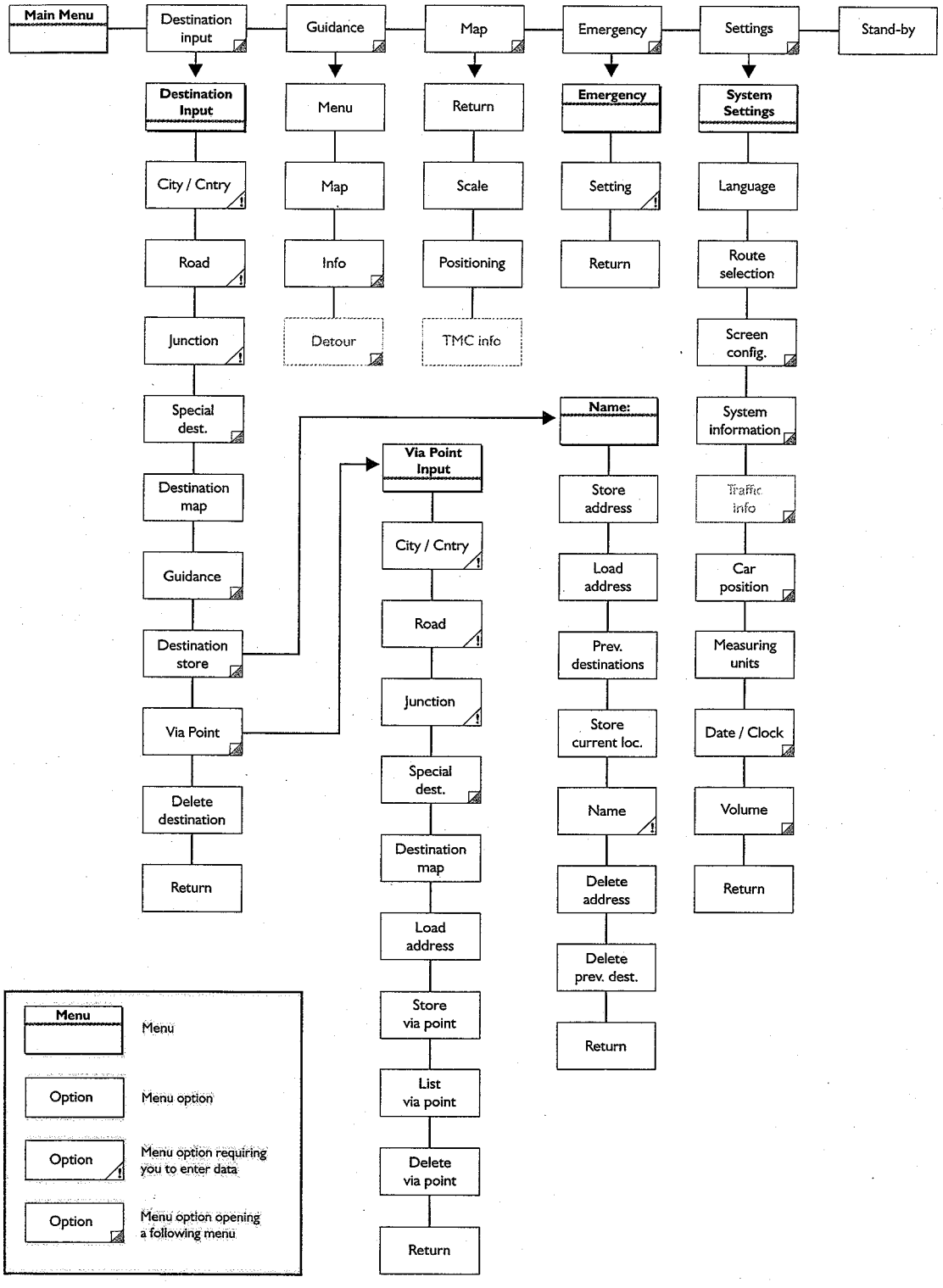
Here you can find the overview of all icons shown for TMC announcements in the guidance screen and map display. This informations is only available with an RDS TMC radio connected to your navigation system.

Symbol	Explanation
With small map scales (for example 20 km, 50 km and 100 km).	
	Traffic obstructions in the indicated direction
	Traffic obstruction in both directions
In detail and in the guidance screen:	
	Roadworks
	Danger
	Slippery road
	Poor weather conditions
	Poor road conditions
	Limited visibility
	Heavy winds
	Accidents

Symbol	Explanation
	Queueing traffic
	Stationary traffic
	Delays
	Unusual load
	Road narrows
	No available parking
	Wrong-way driver. Please do not overtake!
	Closed road
	SMOG alert
	Vehicle height restriction
	Listen to radio announcements!

MENU OVERVIEW

Here you can find a summary of the most important menus and menu options:



TROUBLESHOOTING

There may be times when you suspect that your CARiN Navigation System is not functioning as you expect it to. Before calling for service please read the operating instructions and check the following list. You may find that an apparent malfunction can easily be rectified.

Symptoms	**Possible cause / Remedy**
System does not start, screen is dark.	• Switch on the ignition. Ignition already switched on; system is in stand-by mode: • Press one of the cursor keys, the **ENTER/O.K.** key or the **MENU** key on the remote control.
After some time of normal operation, the system switches off.	At extreme high or low temperatures the built-in protection circuit switches off the system automatically. • Operation of the system is resumed as soon as the temperature returns to a normal level.
System does not react to key presses, if remote control is not in its holder.	Batteries are exhausted. • Change batteries in the remote control or • slide the remote control back into its holder.
System reacts very slowly to key presses or calculates very slowly.	You are in a very densely digitized area. The navigation system has to read a large amount of data from the CD-ROM.
"Guidance" option can not be selected from the Main Menu.	• Make sure that you entered a destination address.
System plans no route although a destination was entered.	Car is not on a digitized road. • Drive in the direction of a digitized (displayed) road.
Guidance advice not audible.	• Make sure that "Voice" is set to "on" in the System Settings menu (icon is **not** in the display). • Make sure that the "Volume" is not set to minimum in the System Settings menu. If no external speaker is connected: • Standard display: Make sure that the "VOL" thumb wheel is not adjusted to minimum volume (left stop). • Wide Screen display: Make sure that the "Volume" setting in the OSD menu is not set to minimum or the "Loudspeaker" option in the setup menu of the display is not set to "Off".
Some of the items shown in the instruction manual are not visible in the status line.	• Activate / deactivate the desired items with options "Status line left" and "Status line right" in the System Settings menu.
Only "Stand-by" can be selected in the Main Menu after switching on the ignition.	• Wait a few seconds until the system has booted (options appear in highlighted letters).
No destination address input is possible by map.	Destination input by map is only possible when the car speed does not exceed 30 km/h.
Storing an address is not possible in map display mode.	• Decrease map scale value to 100 m, 200 m, 500 m or 1 km.

Colour of the satellite icon on the GPS logo is constantly red.	• Make sure the GPS aerial is not covered by any objects. • Drive outdoors, if you are in a garage, a car park or a tunnel.
Display shows "NO CD" or "WRONG CD"	• Make sure that an appropriate CD is inserted with the printed side facing up in the CD player.
CD is ejected unintentionally.	The CD might be dirty. • Try to clean the CD with a special CD cleaning fluid.
Current time in the status line is wrong.	• Adjust the time zone in the Systems Settings menu, option "Date / Clock".
Not possible to store address in the address book.	Address book is full. • Delete one or more entries no longer required.
Entered relocation junction is not accepted during car position input.	Not all junctions, you can enter with the "typewriter" are suitable for relocation. • Select a junction displayed in the list.
Guidance is not precise.	Inaccuracy of a max. of 30 m is possible. If you frequently discover greater inaccuracy, contact an authorized service centre.
Displayed car position does not correspond with actual car position.	Bad GPS reception for a longer period of time. When sufficient GPS reception is resumed the position is corrected automatically. • If necessary wait a few minutes.
Guidance advice does not correspond with actual traffic situation.	It is possible that the car position calculated by the navigation system is currently wrong.
	The route may have been changed and does not correspond with the information stored on the map CD.
When a RDS TMC radio is connected: TMC icon in the status line is always red, no traffic information is displayed.	• Switch on the radio, switch on TMC function and tune to a station broadcasting TMC information (see radio manual).

If you can't find a solution to any problem you may encounter, contact an authorized dealer or call our customer help desk:

GB **01 869 365 107**